

Application No. 10/010,435  
Amendment dated October 26, 2005  
Reply to Office Action of April 26, 2005

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**REMARKS/ARGUMENTS**

1. In the Office action of April 26, 2005, the Examiner rejected claims 15-20 as directed to an independent invention. Claims 15-20 has been withdrawn from consideration as non-elected as suggested by the Examiner.

2. Examiner objected to Claim 4 as being of improper dependent form. Claim 4 has been cancelled by Applicant.

3. Applicant understands that should claim 3 be found allowable, claim 14 may be objected to as a duplicate.

4. Examiner rejected claims 1-2, 7-8 and 10-11 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 4,269,617 to Shibuya et al. in view of collective teachings of Miller and Gijima, and also in view of collective teachings of Schauptert and Schmitte. Additionally, the examiner rejected claims 5-6 and 12 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 4,269,617 to Shibuya et al. in view of collective teachings as above, and further in view of Ogura (USPN 5,535,030) and Bayer (USSN 3,886,014), respectively. Finally, the Examiner rejected claims 1, 3-8 and 10-14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 2,643,020 to Dalton, in view of various other prior art teachings.

Applicant has amended Claim 1 to clarify the subject matter of the invention. In making these revisions care has been taken to ensure that no new matter has been introduced.

Applicant would like to thank Examiner Rossi for the opportunity to discuss the application and the prior art references in a personal interview on October 19, 2005. The primary references of Shibuya and Dalton were discussed, and how they alone and in combination with the rest of the prior art references cited by the Examiner in the Office action of April 26, 2005, fail to teach the method of the present invention.

Applicant respectfully submits the following arguments as presented during the interview.

**Claim Rejections – 35 U.S.C. § 103**

The Examiner rejected claims 1-2, 4, 7-8 and 10-11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,269,617 to Shibuya et al., in view of various other prior art teachings. Additionally, the examiner rejected claims 1, 3-8 and 10-14 under 35 U.S.C. § 103(a) as

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being unpatentable over U.S. Patent No. 2,643,020 to Dalton, in view of various other prior art teachings.

The present invention is directed to a method of constructing edge sealed glass panels comprising *tempered* glass sheets, wherein the tempering is substantially maintained in the sheets (i.e., substantial annealing of the sheets *is avoided*). There are two important steps of Claims 1 and 14, as amended above, which can be paraphrased as:

(1) *heating the glass sheets to a first temperature to temper each sheet and to form an hermetic bond between the solder glass and each glass sheet, which bond is maintained after each sheet has been tempered. (emphasis added)*

(2) *heating the glass sheets to a second temperature which is lower than the first temperature to form an hermetic seal between the two solder glass bands while substantially avoiding annealing of either glass sheet. (emphasis added)*

Thus, Claims 1 and 14 firstly require a tempering step which also binds the solder glass to each sheet. Secondly, the tempering step is now defined to be conducted such that the solder glass bond with the sheet is maintained after tempering. Thirdly, the tempering step must also be conducted so that, at the second lower temperature, an hermetic seal is able to be formed between the two solder glass bands, and whilst not substantially annealing either glass sheet.

The following definitions of tempering and annealing are provided by the inventor. The definitions have been provided to the examiner to explain how a skilled person in the art of glass panel manufacture would understand the terms "tempering" and "annealing", as used in the present specification. The following points also relate to a normal tempering process to create a tempered (sometimes referred to as a "toughened") glass sheet.

When used in relation to common manufacturing processes in a wide variety of materials (other than glass), the term "tempered" generally means to alter or reduce the internal stresses. When used in the context of glass technology, the word "tempered" is conventionally taken to have a somewhat different, and very specific meaning. In connection with glass, the word "tempered" is used to describe a glass sheet in which the external surfaces are under compressive stress, and the interior region of the sheet is under tensile stress. The word "tempering" is used to describe the process that produces tempered glass sheets.

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The combination of stresses in tempered glass has two consequences. Firstly, compared with annealed glass, considerably more tensile stress must be applied to tempered glass in order for it to fracture. Secondly, when a breakage occurs, tempered glass shatters into small chunks, rather than sharp shards as is the case with annealed glass. This means that tempered glass is much stronger and safer than normal untreated glass.

In order to create and maintain the stresses in tempered glass, the glass sheet must be heated to such a high temperature that it is no longer brittle; indeed, it is essentially a very viscous fluid. The glass sheet is then rapidly cooled. For soda lime glass, the temperature to which the glass sheets are heated in the tempering process is typically somewhat above 600°C.

The cooling process typically involves directing jets of cold air onto both glass surfaces. During this process, the temperature of the entire glass sheet rapidly reduces. Because the cooling occurs from the external surfaces of the glass, the temperature of these external surfaces very quickly becomes significantly less than that of the interior region. For some time as the cooling proceeds, this temperature difference between the outer and inner regions of the glass remains much the same. However, while the glass is still above the transition temperature, and therefore relatively soft, even though large temperature gradients exist in the glass, these temperature non-uniformities do not cause stresses to form in the glass sheets. As the glass sheet cools to below the annealing temperature, large temperature gradients still exist within it. Below this temperature, however, no further annealing of the glass sheets can occur. Any differential contraction between different parts of the glass will thus produce stresses in the glass sheet that are essentially permanent. As the glass sheet cools from this point to room temperature, the temperature decrease of the external surfaces is obviously much less than that of the interior region, because the external surfaces are already significantly cooler than the interior. Below the annealing temperature, the external surfaces therefore contract much less than the internal region. This difference results in compressive stresses being established in the external surfaces, and tensile stresses being formed in the interior region.

The tempering process must therefore include both heating the glass sheet to above the transition temperature (typically, this means heating the glass to temperatures in excess of 600°C), and then subsequently cooling it rapidly in a carefully controlled manner.

The process of annealing glass is generally described as follows:

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Heating a piece of glass until its temperature reaches a stress-relief point, that is, a temperature at which the glass is still too hard to deform, but is soft enough for internal stresses to relax in a reasonable amount of time (typically a few minutes to an hour). The piece is then allowed to heat-soak while its temperature is even throughout until the stresses are relieved; the time necessary for this varies depending on the type of glass and thickness of the thickest section. The piece is then slowly cooled at a **predetermined rate** until its temperature is below a critical point, at which it can no longer generate internal stresses, and then the temperature can safely be dropped to room temperature. This relieves the internal stresses, resulting in a piece that should last for many years. Glass which has not been annealed may crack or even shatter spontaneously when subjected to a relatively small temperature change or other shock.

Heat-treated glasses are classified as either fully tempered or heat strengthened. According to Federal Specification DD-G-1403B:

Fully tempered glass must have a surface compression of 10,000 psi or more or an edge compression of 9,700 psi or more.

Heat-strengthened glass must have a surface compression between 3,500 and 10,000 psi, or an edge compression between 5,500 and 9,700 psi.

The fracture characteristics of heat-strengthened glass vary widely from very much like annealed glass near the 3,500 psi level to similar to fully tempered glass at the 10,000 psi level. Following this analysis, the method as defined in Claims 1 and 14 as presently amended can be understood to produce the following outcome:

1. Temper a glass sheet and bind a solder glass thereto in one step;
2. Cool the tempered sheet, so that the solder glass does not shear off (see proposed amendment to claims 1 and 14);
3. After heating to a temperature consistent with the tempering process and cooling the glass sheets and solder glass, bind together the two solder glass bands on the respective confronting glass sheets during a second heating step at a lower temperature than the tempering temperature; and
4. Whilst so binding the glass bands together, not substantially annealing the glass sheets.

In summary, the method of the present invention is the first of its type to produce a tempered, non-annealed edge sealed glass panel. Applicant points out that, prior to the method of the

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present invention being developed, the art did not believe it possible to produce tempered glass sheets that could be bonded in a subsequent heating step, and without annealing the sheets.

It is respectfully submitted that the prior art documents, either alone or in combination, do not disclose all of these outcomes and thus do not teach all of the method steps of independent claims 1 and 14, as presently amended.

It is respectfully submitted that the prior art teaches in a manner that contradicts the steps of claims 1 and 14, namely, that when a person heats solder glass to a tempering temperature for a glass sheet, it would be expected that solder glass on the sheet will crystallise, thus rendering it incapable of subsequently remelting and bonding. In other words, at the priority date of the present invention, the prior art taught that a skilled person could not form a panel which comprises two confronting edge sealed and tempered glass sheets.

***Summary of the cited Prior Art Documents***

For the Examiner's ease of reference, a summary of the key differences of the prior art to the present invention is first provided in tabular form:

Reference	Disclosure
Shibuya	Discloses a two step process but teaches away from tempering. Teaches that higher (ie. tempering) temperatures are to be avoided in the first step because the solder glass will crystallise and therefore <u>not remelt</u> for the second step, carried out at a lower temperature. Also, does not teach effecting a hermetic seal between the two solder glass bands whilst avoiding annealing; to so teach would be meaningless as there is no tempering in Shibuya in the first place.
Miller	Collectively teach that as an option one could make <u>particular types</u> of LCD panels with tempered glass, however, there is no detail as to how. The clear inference from both documents is that one would start with <u>already tempered</u> glass sheets. However, neither document is concerned with tempering and binding of a solder glass in one step, nor with the subsequent steps to make an edge sealed panel in which tempering is retained.
Gunjima	

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Schaupert	Teaches a glass stripping process using a glass powder slurry having a very different thermal expansion coefficient to a ceramic substrate. The glass powder and glass plate are heated to 775°C (the word "tempered" is used but in this context it is generically referring to heating). The resulting fused product is then cooled to strip off a coating from the ceramic substrate (ie. the glass slurry is cooled so that it deliberately fractures and tears off the coating during cooling as a result of the large shear stresses caused by the significant differential between the expansion coefficient of the ceramic substrate and the glass slurry). Document does not teach a controlled tempering process as per the present invention (ie. the retaining of internal stresses in the glass sheet) nor the retention of the solder glass on the panel after tempering. The document does not produce an edge sealed panel; it teaches <u>destroying</u> the substrate surface.
Schmitte	Discloses applying a thin film (not glass) coating to a glass sheet before tempering, hence discloses a very different process. However, this document does disclose that the glass tempering temperature can be in a range around 600-650°C (ie. well above the Shibuya upper temperature).
Dalton	Discloses using a soft brazing glass to join glass articles without introducing permanent strain in the composite article, or to join tempered glass parts without releasing the stress. This document is not concerned with tempering and binding of a solder glass in one step as per claims 1 and 14. This document also does not show the subsequent steps of claims 1 and 14, namely, binding together the two solder glass bands on respective confronting glass sheets at a lower temperature than the tempering temperature whilst not substantially annealing the glass sheets.

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Veres	Discloses using <u>layers</u> of higher and lower melting point sealing compositions that are applied in two distinct steps to obtain a seal. Veres does not disclose a tempering procedure at all, nor can it therefore be concerned with tempering and binding of a solder glass in one step as per claims 1 and 14. Veres is concerned with a method in which multiple layers are applied in multiple steps.
Bayer	Merely discloses curved confronting glass sheets.
Ogura	Merely discloses the use of pillars between glass sheets.

***Summary of the differences over the Examiner's combinations of Prior Art Documents***

- A skilled person would not be motivated to combine Shibuya with a document that discloses glass tempering. This is because Shibuya actually teaches away from the use of a glass tempering process. On reading Shibuya a skilled person would not be motivated to go and look at glass tempering processes because at column 5, lines 11-17 Shibuya is teaching the skilled person that the standard tempering temperatures would not permit the Shibuya process to work.
- A skilled person would not be motivated to combine Dalton, which does not disclose tempering and binding of a solder glass in one step, with Veres which is a different process for a different purpose to that of Dalton and not at all concerned with making a join between solder glass and a glass sheet, nor with tempering. Even if Dalton and Veres could be combined, they still do not collectively teach all of the steps of the methods of claims 1 and 14. For example, they do not teach the second step of claims 1 and 14.

The following is a detailed analysis of the cited prior art references:

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**Shibuya (US 4269617)**

This document discloses a process in which a glass frit paste band is positioned around each glass sheet of an LCD element. The document also discloses primary and secondary firing temperatures.

The primary temperature forms a bond between the glass frit paste band and each glass sheet. However, at column 5 lines 11-17, Shibuya specifies a temperature range of 400-430°C. The document stipulates that below this range the glass frit is not "sufficiently fluidized" and above this "the glass frit will become crystalline." (emphasis added)

The examiner admits that "Shibuya is silent as to tempering each glass sheet". In fact, this silence in Shibuya results from the fact that Shibuya actually teaches a skilled person away from the use of tempering, as will be explained hereafter.

As referred to by the examiner, Shibuya at column 5 lines 11-17 and column 6 line 68 to column 7 line 1, discloses that the first temperature is about 430°C for about 15-45 (30) minutes. A skilled person would understand that this does not equate with any temperature which would result in tempering.

At page 5 of the Office Action the examiner refers to page 6, lines 15-19 of the present specification as indicating Applicant's tempering temperature. This is not a correct interpretation. These lines state:

"For glass sheets made from soda lime glass, the solder glass used would for example have a "conventional" specification of being fusible with soda lime glass at 450-480°C for one hour, or at higher temperatures for a shorter time. The tempering process will be chosen to cover those specifications. However, the second heating process, i.e. the fusing of the bands of solder glass 10, can be performed at 440° C, preferably 350° C for one hour, thereby avoiding a significant stress relaxation in the tempered glass sheets during the second heating process." (emphasis added)

It appears that this paragraph has been misconstrued.

For example, the text "conventional specification of 450-480°C for one hour, or at higher temperatures for a shorter time" is not describing the heating step of a tempering process. It is describing the temperatures at which fusing between the solder glass and the glass sheet takes place (and indeed this is consistent with Shibuya). Notably, the following sentence in the specification was included to clarify this matter. It simply states that "The tempering process will be chosen to cover

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those specifications", or in other words, that tempering will be performed to also ensure that the solder glass fuses with the soda lime glass sheet.

This meaning would be recognised by the person skilled in the art. The skilled person would understand that the first temperature should simply be sufficiently high enough to perform the heating stage of a tempering process, whilst at the same time ensuring that the solder glass fuses with the soda lime glass sheet. Various prior art references, such as Schmitte, disclose that the tempering temperature for soda lime glass is 580-680°C, preferably 600-650°C.

The skilled person would also understand that the temperature and time specifications for a glass sheet to reach the required temperature in the heating step of a tempering process will vary within such ranges, with the type and thickness of the glass.

In summary, Shibuya:

- teaches that the maximum temperature that can be used for primary firing is 430°C, well below the tempering range for soda lime glass;
- actually teaches that higher temperatures should be avoided for the primary firing step because otherwise the glass frit crystallises;
- does not disclose a heating step that is consistent with or that would produce tempering;
- does not mention tempering for a good reason – Shibuya is not a process that is compatible with a tempering step.

**Miller (US 5867238)**

This document is concerned with dispersing a polymer in a liquid crystal material (a "PDLC" material or film). At column 13 lines 8-35 Miller discloses that the PDLC film may be sandwiched between substrates. Suitable substrate materials may include glass (which may be tempered - column 13 lines 25-26 as mentioned by the examiner). This is the only reference to tempered glass in Miller.

The statements in Miller provide no disclosure that is in anyway relevant to the manner of manufacture of an edge sealed glass panel. Further, the statements in Miller refer to the production of a special type of LCD device. There is nothing to suggest that the Miller LCD device could suitably be made using the Shibuya method. For example, employing the temperatures of the Shibuya method may actually melt and/or damage the PCLD film, as it would need to be positioned between the glass

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substrates during secondary heating. Also, the Miller method does not indicate that the resultant "panel" it produces is in any way capable of being edge sealed.

At best, Miller suggests that a pre-tempered glass sheet could be used as a starting point for the sandwiched PCLD device of Miller. Shibuya on the other hand teaches away from the production of a tempered glass sheet in its LCD device.

In summary, there is nothing in either Miller or Shibuya which would motivate a skilled person to combine these documents. As outlined above, it would not be obvious to apply the teachings of Miller to Shibuya (or vice versa) because the teachings of each document are mutually incompatible.

**Gunjima (US 4834509)**

Again, this document is concerned with manufacturing a special type of liquid crystal optical device (ie. one in which substrates, already provided with electrodes, are used to sandwich a liquid crystal material and a resin therebetween).

As mentioned by examiner, the document states at column 9 lines 44-45 that the substrates may be made of tempered glass. Again, this is the only reference to tempered glass in Gunjima.

Again the statements in Gunjima provide no disclosure that is in anyway relevant to the manufacture of an edge sealed glass panel. Also, the statements in Gunjima refer to the production of a special type of LCD optical device (i.e. one in which the LCD material is sandwiched between substrates).

Again, there is nothing to suggest that the Gunjima LCD optical device could suitably be made using the Shibuya method. For example, employing the temperatures of the Shibuya method may actually damage the electrodes or the LCD material or resin. Also, the Gunjima method does not indicate that the resultant "display" it produces is in any way capable of being edge sealed.

Again, at best, Gunjima suggests that a pre-tempered glass sheet could be used as a starting point for its LCD optical device. Shibuya on the other hand teaches away from the production of a tempered glass sheet in its LCD device.

In summary, there is nothing in either Gunjima or Shibuya which would motivate a skilled person to combine these documents. As outlined above, it would not be obvious to apply the

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teachings of Gunjima to Shibuya (or vice versa) because the teachings of each document are again mutually incompatible.

**Schaupert (US 5376197)**

This document is concerned with treating a ceramic substrate to enhance its ability to be recycled. It teaches applying a glass powder slurry having a very different thermal expansion coefficient to the ceramic substrate (a factor of at least 10 in difference – column 3, lines 12-18 and column 5, lines 16-20). The glass powder slurry and substrate are heated to “superficially” attach the glass powder slurry to the substrate (see column 6, line 64). However, it is disputed that the glass is actually tempered as per the present invention (refer to the discussion below).

The Schaupert composite is then cooled, not to achieve a complete tempering of any part but to fracture (tear) off the fused glass slurry and remove the coating from the substrate. Schaupert actually seeks to cause a “conchoidal fracture” in the surface of the substrate.

This is nothing like the method of the present invention, nor is it anything like the method of Shibuya. This is because Schaupert actually teaches destroying the bond between the glass powder slurry and the glass sheet and so teaches away from both the present invention and Shibuya in this respect.

Further, it is disputed that Schaupert teaches a simultaneous bonding and tempering step as per the present invention, because the glass sheet is heated and cooled to deliberately promote subsequent tear-off. In this regard, there is nothing in Schaupert to indicate that the resultant glass sheet would be tempered in a complete manner as contemplated by the present invention. However, even if it were inadvertently so tempered, all Schaupert’s process then produces is a tempered glass sheet, not a tempered glass sheet with a solder glass bonded thereto, and that is also ready for a subsequent fusing step.

At column 6, lines 61-65 Schaupert indicates that the glass is “tempered” to a temperature of around 775°C, a temperature that Shibuya expressly teaches to avoid. Further, this tempering is employed to “superficially” fuse the glass powder onto the substrate, which is nothing like the bond required for the present invention (ie. a hermetic bond).

From the analysis of tempering given above, the examiner should note that Schaupert is not concerned with a normal tempering process that creates a tempered (toughened) glass sheet. In

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Schaupert the term "temper" is used in a general sense, that is, it is clear from the document that it is simply being used to mean "heat". In Schaupert the glass is "tempered at 775°C" but this is not the same as a tempering process that leads to a "tempered glass sheet" as per the present invention, because a skilled person would understand that no material can be tempered at a single temperature, as per the industry standard definition of the glass tempering process. Further, the Schaupert process does not address balancing the internal tensile forces in the glass with the surface compressive forces to form a sample of "tempered glass".

To further stress this point, Schaupert does not outline the necessary steps to produce "tempered glass" as it is not concerned with producing tempered glass – it is a process that is concerned with removing coatings from a ceramic substrate by forcing a removal of the fused glass powder.

In the present invention "tempering" refers to the normal complete tempering process, as understood by a person skilled in the art, involving heating and cooling, with the cooling rate leading to a balance between surface compressive stresses and internal tensile stresses.

In summary, Schaupert teaches away from the present invention and also away from Shibuya. In this regard, Schaupert discloses a heating and cooling process that is designed to detach glass from a glass substrate surface, making use of differential thermal expansion factors. Schaupert's use of the terminology "temper" is general in the sense of "heating" and is not a reference to a complete or normal tempering process as understood by a person skilled in the art.

**Schmitte (US 47158979)**

The citing of this document is not understood. The examiner refers to Schmitte as providing basis for the idea of applying a coating to a glass sheet before it is tempered. However, this document merely discloses the applying of a thin film coating to a glass sheet before tempering. It is concerned with reducing light transmission through the glass sheet. Applicant does not understand why a person skilled in the relevant art of glass panels would have regard to Schmitte.

Schmitte does not teach applying a solder glass to a glass sheet, nor does it teach applying a coating with simultaneous tempering of the glass sheet such that the coating can then bind with another coating on another sheet.

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Further, the physical processes involved in applying a metallic coating and fusing solder glass are completely different as would be well understood by a person skilled in the relevant art.

Applicant does note, however, that Schmitte provides a clear definition of thermal tempering of glass at column 1 lines 43-54 as:

"For producing the thermal tempering, the panes of soda-lime-silica glass which are nearly used exclusively in the said application are quickly heated in air to a temperature above the transformation temperature of the glass and are subsequently quenched. The temperatures required for the tempering process thereby lie in the range from 580° C to 680° C, preferably in the range from 600° C to 650° C. The same temperature range is also required when the glass panes provided flat from glass production are to be subjected to a bending process in order to obtain curved glass panes in certain applications, for example in the automobile sector."

Notably, these ranges are way in excess of those temperatures expressly taught by Shibuya to be avoided.

Applicant further notes that, in the present invention, the temperature employed for the first step that thermally tempers the glass sheet could be defined as a temperature that is "above the transformation temperature of the glass" (ie. the language of Schmitte could be used).

**Dalton (US 2643020)**

This document is concerned with "welding" preformed glass parts together. It discloses (column 7 line 42 to column 8 line 13) using a "soft brazing glass" to join:

- glass articles without introducing permanent strain in the composite article; or
- tempered glass parts without releasing the stress.

As stated by the examiner, Dalton is silent as to tempering a glass sheet with the soft glass thereon and is silent as to providing solder glass at the margin of each glass sheet.

**Veres (US 2936923)**

This document is concerned with joining hollow glass parts to form an "envelope". It discloses using layers of different "sealing compositions". The higher melting point composition (column 3 line 25-29) has a melting point below 1000°F (ie. 538°C). 538°C is well outside of and below the lower temperature of the Schmitte prescribed glass tempering range. A lower melting point

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composition which softens at 735°F (ie. 391°C) (column 3, lines 60-63) is positioned between the higher melting point compositions, and is softened to then join the parts.

The examiner has not verified that "a skilled artisan would have appreciated that such temperatures (of Veres would be) sufficient for tempering glass". As stated above, a temperature of 538°C is well outside of and below the lower temperature of the Schmitte prescribed glass tempering range.

Veres is also silent as to tempering the glass parts with the higher melting point glass thereon. The glass parts are simply dipped into a molten bath of the higher melting point composition, which has a temperature below that at which normal glass tempering takes place. As would be appreciated by a skilled person, and from the explanations of tempering given above, dipping would not lead to glass tempering, hence there is nothing in Veres to indicate glass tempering.

Further, the stresses which may be "annealed" in Veres are those that result from the forming of the glass parts and the subsequent in-use vacuum forces, not from any tempering. Veres is thus silent on tempering.

Applicant submits that Veres is a different process and for a different purpose to that of Dalton. It is a two-step joining process particular to hollow parts such as cathode ray tubes, and it is submitted that a skilled person would have no motivation to look to Dalton after reading Veres.

If the Applicant were to accept the examiner's proposition that a skilled person might think to combine Dalton with Veres, there still is no teaching of the step of claims 1 and 14 involving "heating the glass sheets to a first temperature, to temper each sheet and to form an hermetic bond between the solder glass band and the associated surface of each glass sheet, which bond is maintained after each sheet has been tempered."

The examiner attempts to rely on Schauptert and Schmitte as providing this missing step. However, as stated above, both the Dalton and Veres temperatures are well below those prescribed in Schauptert and Schmitte. Further, the processes of Schauptert and Schmitte are vastly different to both Dalton and Veres. Applicant cannot envisage any situation where a skilled person would have any motivation to look to Dalton and Veres after reading Schauptert and Schmitte, or vice versa. Also, if Schauptert and Schmitte are not relevant to Shibuya, for the reasons as outlined above, they would also not be relevant to Dalton and Veres.


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Since none of the cited references alone or in combination teach a method of manufacturing a glass panel of the present invention, Applicants respectfully submit that all the pending claims as previously presented and currently amended and added, are novel and allowable in view of the cited prior art. The application is now in condition for allowance, which allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1135.

Respectfully submitted,  
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